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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,312	10/31/2003	John M. Raterman	NOR-1127	9805

37172 7590 08/25/2004

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EXAMINER :

PASCHALL, MARK H

ART UNIT PAPER NUMBER

3742

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/698,312

Applicant(s)

RATERMAN ET AL

Examiner

Mark H Paschall

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 03-2004.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Oath/Declaration

The second inventor, Edward C. Taylor, does not sign the oath. Correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,4,5,6,9,10,12-17 and 19 rejected under 35 U.S.C. 103(a) as being unpatentable over Locke, Jr. et al in view of Koether 285'. Locke, Jr. et al teach the claimed subject matter, including heater and sensor sections 14 and 16 for a hot melt system, but does not show use of a second temperature sensor, which acts as a redundant sensor and is activated in response to a malfunction detected in the first sensor. The patent to Koether is applied for teaching use of a backup thermostat, which contains a sensor probe, with the backup thermostat being connected in lieu of the primary thermostat when a malfunction is detected in the primary thermostat sensor. This comprises a redundant sensor, and this leads to a safer operating device. (See Summary of invention). In view of this teaching it would have been obvious to modify the Locke, Jr. et al device to include a backup temperature sensor which is switched into active use upon a malfunction detected in the primary sensor, this modification leading to a safer operating device. Note that if a short or open condition is detected in

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the primary probe 95 in Koether, gate 59 is opened which deenergized relay 60 which in turn transfers control to the backup thermostat 85. As per claim 5 the probes in Koether are resistance probes. As per claim 12 the sensors are connected to a common ground. As per claim 6 use of simultaneous biasing of the second thermostat is considered obvious to the artisan, since bias exists through ground and bias could merely mean biased in a standby_condition. As per dependent claims 4 and 9 notes that Locke, Jr. et al do teach the control circuit in a hot melt dispensing system.

Claims 2,3,7,8,11,18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Locke, Jr. et al in view of Koether as applied to claims 1,5,6,10,12-17 and 19 above, and further in view of Cargill et al. The claims call for an indication of the sensed malfunction, not taught in the Locke, Jr. et al system as modified by Koether. However, as set forth in Cargill et al it is conventional to indicate malfunction of the primary temperature probe 46 and use of the same does lead to a safer operating system by alerting the user of the device of the malfunction. In view of this teaching it would have been obvious to modify Lock , Jr. et al further to include a indication of the malfunctioning sensor, to effect a safer control circuit .

Conclusion


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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Williams et al, Bilstad et al and Clark et al are cited for disclosing temperature controllers having multiple sensor systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark H Paschall whose telephone number is 703 308-1642. The examiner can normally be reached on 7am - 3pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 703 305-5766. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Mark H Paschall
Primary Examiner
Art Unit 3742

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